

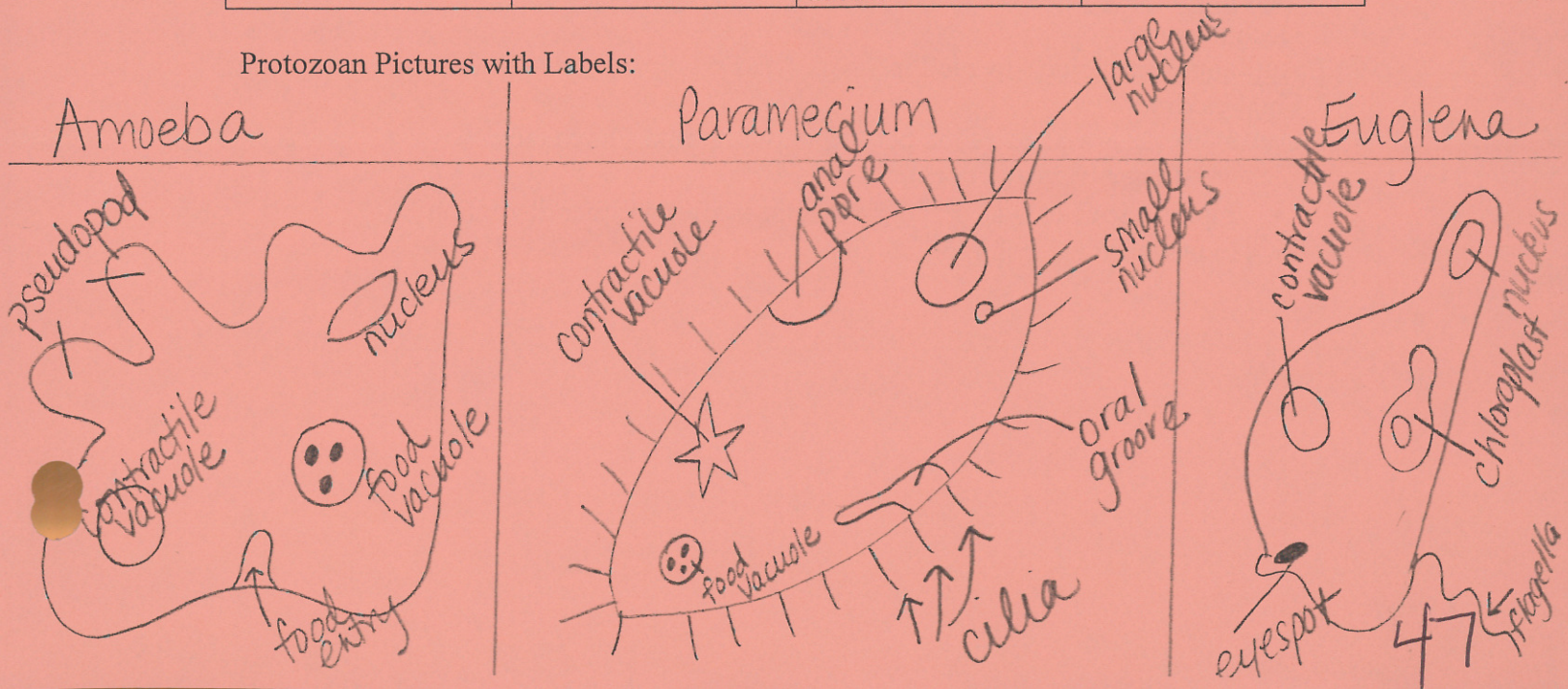
Characteristics of Protists:

- Protists can be unicellular or mutlicellular.
- Protists live in moist or wet surroundings.
- Protists are eukaryotes.
- Protists reproduce asexually and sexually.

Protists can be classified by characteristics shared with other kingdoms or how they obtain energy.

Protist Type	Animal-like	Plant-like	Fungus-like
Can it move?	Yes	Yes and no; Depends	At some point in their life
How many cells?	Unicellular	Unicellular and multicellular	Unicellular and mutlicellular
How does it obtain energy?	Consumers	Producers	Decomposers
Examples	Pseudopod Cilia Flagella Parasite	Diatoms Dinoflagellates Euglenoids Algae (red, brown, green)	Slime molds, water molds, downy mildew
Nicknames	Protozoans	Algae	
Interesting Facts	Special movement capabilities	Green algae close to plant characteristics; Red and brown algae are used in foods.	Have cell walls and reproduce with spores

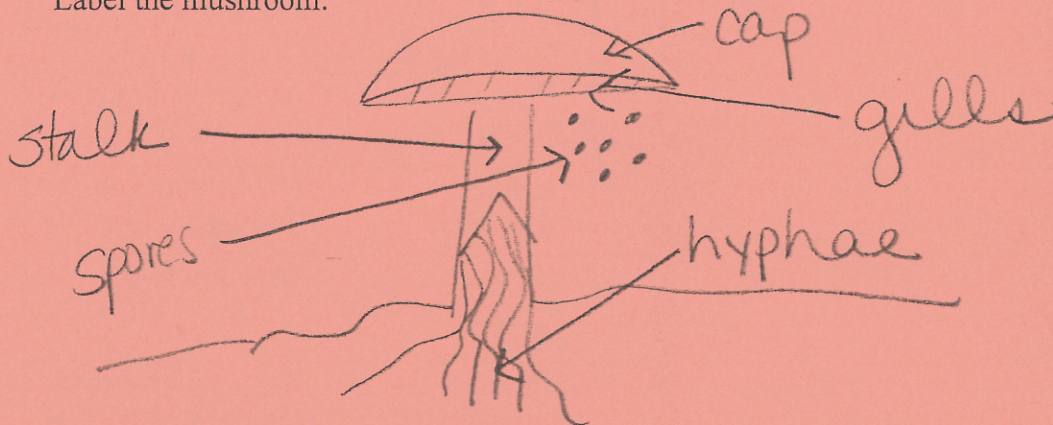
Protozoan Pictures with Labels:



Characteristics of Fungi:

- Fungi grow best in moist and warm areas.
- Most are multicellular, but yeast is unicellular.
- Fungi have **nuclei** and thick **cell walls** made of **chitin**.
- Fungi are similar to plants, but lack specialized **tissues** and **organs** such as **leaves** and **roots**.
- Fungi can be **consumers**, but most are **decomposers**.

Label the mushroom:



Hyphae = chains of cells similar to plant roots

Reproduction:

- Fungi reproduce with **spores**, which can be produced **asexually** or **sexually**.
- A spore is a waterproof **reproductive** cell that can grow into a new **organism** released into the **air** and spread by the **wind**.
- Yeasts reproduce asexually through **budding** = new **cell** grows out of a body on the **parent** (much like a bud on a tree)

Fungi are classified into 4 groups based on its shape and how it reproduces.

Fungal Importance:

1. Decomposers
2. Antibiotics/medicine -- penicillin
3. Food/baking
4. Cause disease -- athlete's foot, corn smut, wheat rust, Dutch elm
5. Lichen – fungus + algae or bacteria
 - **Pioneer species** – 1st organism to appear after weather disruption
 - Indicator of air pollution